

EXPLANATION

All numbers are in cubic feet per second.
 + Flow into the aquifer from adjoining area.
 - Recharge to the aquifer.
 - Discharge from the aquifer.
 ← Discharge from (-) or recharge to (+) the aquifer through the Spokane and Little Spokane Rivers.

ESTIMATED AVERAGE RATES OF RECHARGE TO AND DISCHARGE FROM THE AQUIFER

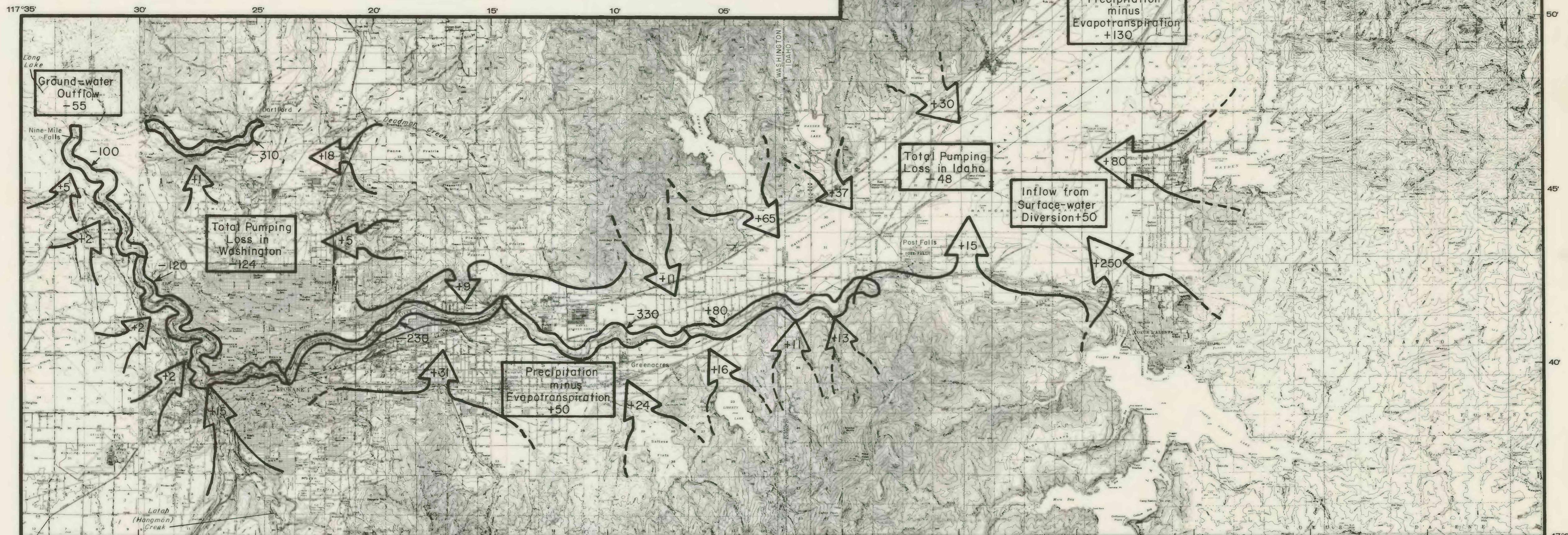
CUBIC FEET PER SECOND
Approximate Approximate
SUBTOTAL TOTAL

RECHARGE
 Flow into aquifer from adjoining areas-----+1,010
 Idaho (Thomas, 1963; Frink, 1964; Pluhowski and Thomas, 1968; and Hammond, 1974)---+800
 Washington (Thomas, 1963; Tanaka, 1975)---+210
 Precipitation minus evapotranspiration on the land surface above the aquifer-----+ 180
 Idaho (Thomas, 1963)-----+130
 Washington (Tracy, 1977)-----+ 50
 Seepage from Spokane River between Post Falls, Idaho, and Greenacres, Wash.-----+ 80
 Inflow from surface-water diversion (recharge by water diverted from Spokane River east of Post Falls, Idaho, and applied to land surface above aquifer)
 (Pluhowski and Thomas, 1968)-----+ 50
 TOTAL RECHARGE +1,320

CUBIC FEET PER SECOND
SUBTOTAL TOTAL

DISCHARGE
 Seepage to Spokane River (Tracy, 1977)----- 780
 Greenacres to Trent, Wash.----- -330
 Trent to Spokane, Wash.----- -230
 Spokane to Seven Mile Bridge, Wash.----- -120
 Seven-Mile Bridge to Nine-Mile Bridge, Wash.----- -100
 Seepage to Little Spokane River between Dartford and about 3 miles above its mouth (Tracy, 1977)----- 310
 Total pumping loss in Washington----- 127
 Ground water pumped from aquifer and discharged to Spokane River and Peone Creek----- 62
 Consumptive use of ground water (water pumped from aquifer and removed by evapotranspiration)----- 65
 Total pumping loss in Idaho----- 48
 Ground water pumped from aquifer and discharged to Spokane River----- 2
 Consumptive use of ground water (water pumped from aquifer and removed by evapotranspiration)----- 46
 Ground-water outflow below Nine-Mile Falls (Tracy, 1977)----- 55
 Ground-water outflow to the Latah and other adjoining formations (this item is unknown but believed to be insignificant)-----
 Ground-water evapotranspiration (this item is assumed to be insignificant due to the depth of the water-table throughout most of its area)-----
 TOTAL DISCHARGE -1,320

CHANGE IN STORAGE----- 0



Base from U.S. Geological Survey, Blanchard, (40ft), Edgemere, (20ft), Careywood, Cocolalla, (40ft), 1968, Idaho, 1:24,000; Clayton (25ft), 1950; Deer Park, 1949; Medical Lake, Spokane, 1950, (40ft), Washington; Mt. Spokane, (50ft), 1950; Greenacres, (40ft), 1949, Washington-Idaho; Spirit Lake, Athol, 1961; Coeur D'Alene, 1957, (40ft); Lane, (80ft), 1957, Idaho, 1:62,500.

0 1 2 3 4 5 6 7 8 9 10 MILES

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 KILOMETERS

PLATE 4-- Map of Spokane Valley-Rathdrum Prairie aquifer showing estimated average rates of recharge to and discharge from the aquifer.